(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
6 January 2005 (06.01.2005)

PCT

(10) International Publication Number
WO 2005/001497 A1

(51) International Patent Classification[7]: G01R 33/28

(21) International Application Number: PCT/IB2004/001955

(22) International Filing Date: 1 June 2004 (01.06.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/484,003 30 June 2003 (30.06.2003) US

(71) Applicant *(for all designated States except US)*: KONINKLIJKE PHILIPS ELECTRONICS N.V. [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: PETOT, Bradford, W. [US/US]; 595 Miner Road, Cleveland, OH 44143 (US). DEMEESTER, Gordon, D. [US/US]; 595 Miner Road, Cleveland, OH 44143 (US). AMOR, William, H. [US/US]; 595 Miner Road, Cleveland, OH 44143 (US).

(74) Common Representative: KONINKLIJKE PHILIPS ELECTRONICS N.V.; c/o LUNDIN, Thomas, M., 595 Miner Road, Cleveland, OH 44143 (US).

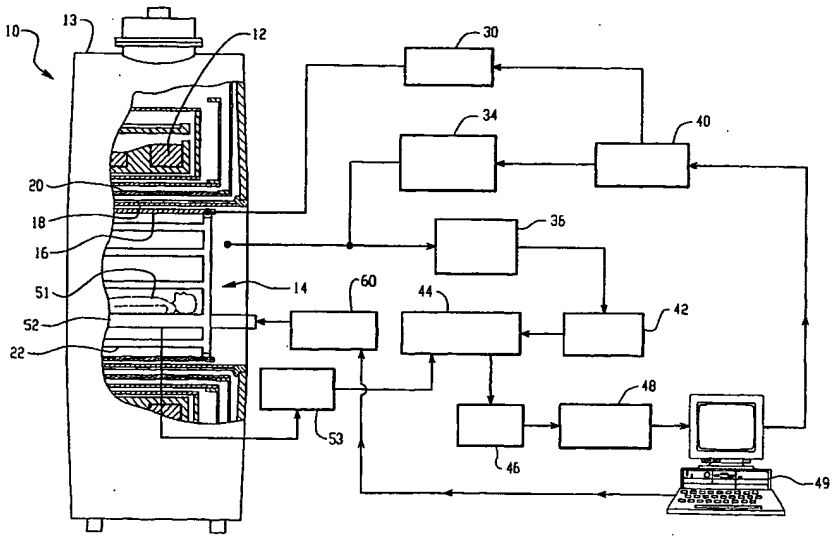
(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— *with international search report*

[Continued on next page]

(54) Title: TABLE POSITION SENSING FOR MAGNETIC RESONANCE IMAGING



(57) Abstract: An MRI apparatus is provided. The MRI apparatus includes a main magnet (12) for generating a main magnetic field in an examination region, a plurality of gradient magnets (16) for generating magnetic field gradients in the main magnetic field, a radio frequency coil (22) for transmitting radio frequency signals into the examination region and exciting magnetic resonance in a subject disposed therein, and a radio frequency coil for receiving the magnetic resonance signals from the subject. The MRI apparatus also includes subject support (52) for supporting the subject, a position controller (60) for controlling the position of the subject support within the examination region, and a position encoder (53) for directly measuring the position of the subject support.

WO 2005/001497 A1

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.